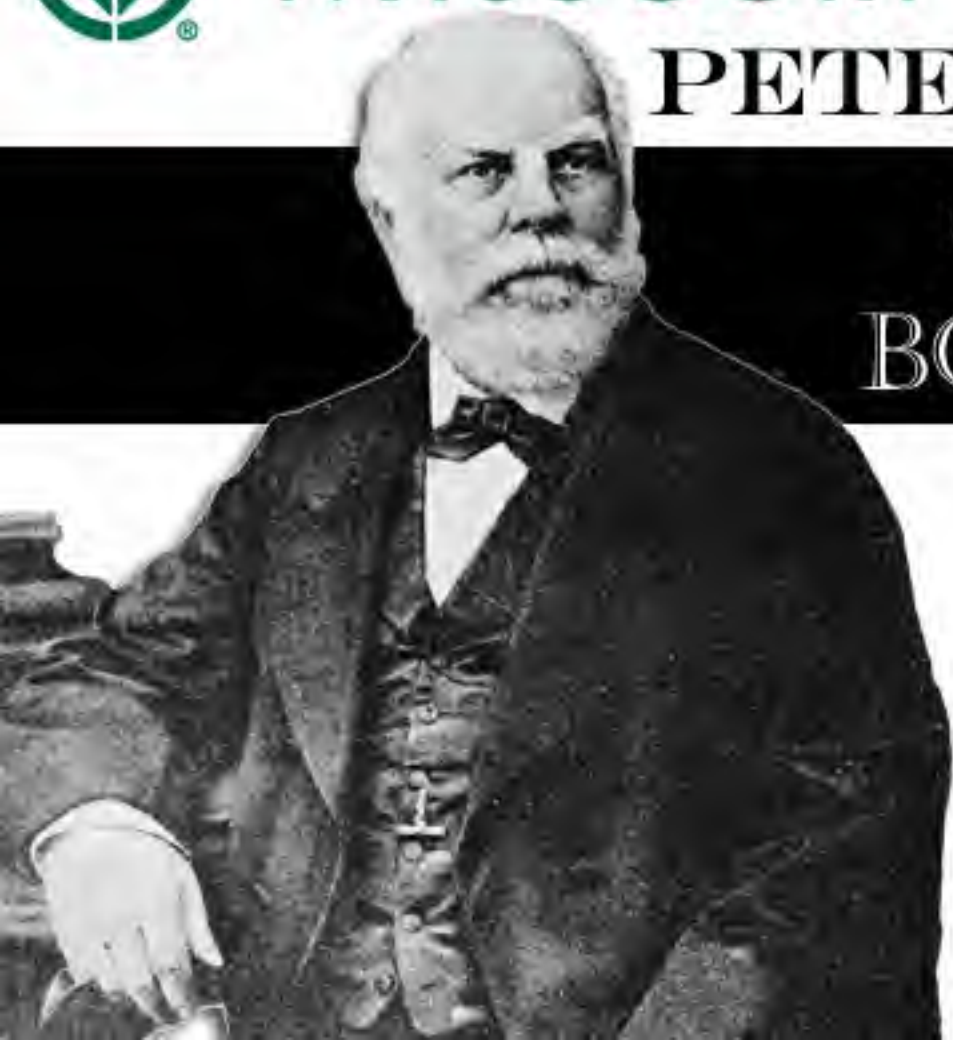


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BOTANICAL NOTEBOOKS



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L. diffusus Hoppe

too near glaucous?

The leading advocate of the first doctrine is Murchison (*London Lancet*, July, 1865, p. 320.) He bases his belief in the identity with typhus, principally in the dissolution of the blood, the petechiæ, and the frequent occurrence of cerebro-spinal symptoms in certain epidemics of undoubted typhus, as well as the pretended similarity of causation. But the first named is by no means a constant sign in the post-mortem reports of other observers, and Niemeyer explains that it is not rare in non-infectious, acute diseases, which take a *rapidly* fatal course. And petechiæ have been so rare in many epidemics that Dr. Stille objects to the name of *spotted fever* "for a disease in which a majority of the patients present no spots at all." In the epidemic of Baden, the petechial eruption was decidedly a subordinate phenomenon. A later American writer, Baltzell, (*Am. Journ.*, Oct. 1865, p. 368,) expresses similar views. The majority of Americans observers countenance the second doctrine: that it is a blood

135



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meningitis; so likewise does Black (*l. c.*, *p.* 346,) when he says:
“From this it would appear that the nervous involvement is more
pathognomonic than the blood extravasation (*petechiæ*, *REV.*,)
and that the latter may be regarded only as ocular evidence of
blood degeneration from the presence of a zymotic agent, whose
chief, and perhaps primary, force is spent upon the cerebro-spinal
axis.” But he adds: “That this affection differs from ordinary
traumatic and sthenic inflammation of the nervous centres, I
entertain not the slightest doubt.”

Niemeyer's own opinion, that all the phenomena of cerebro-
spinal meningitis, depend exclusively on the anatomical lesions
produced by the infection, takes its shape undoubtedly from the
peculiar post mortem appearances in the special epidemic which he

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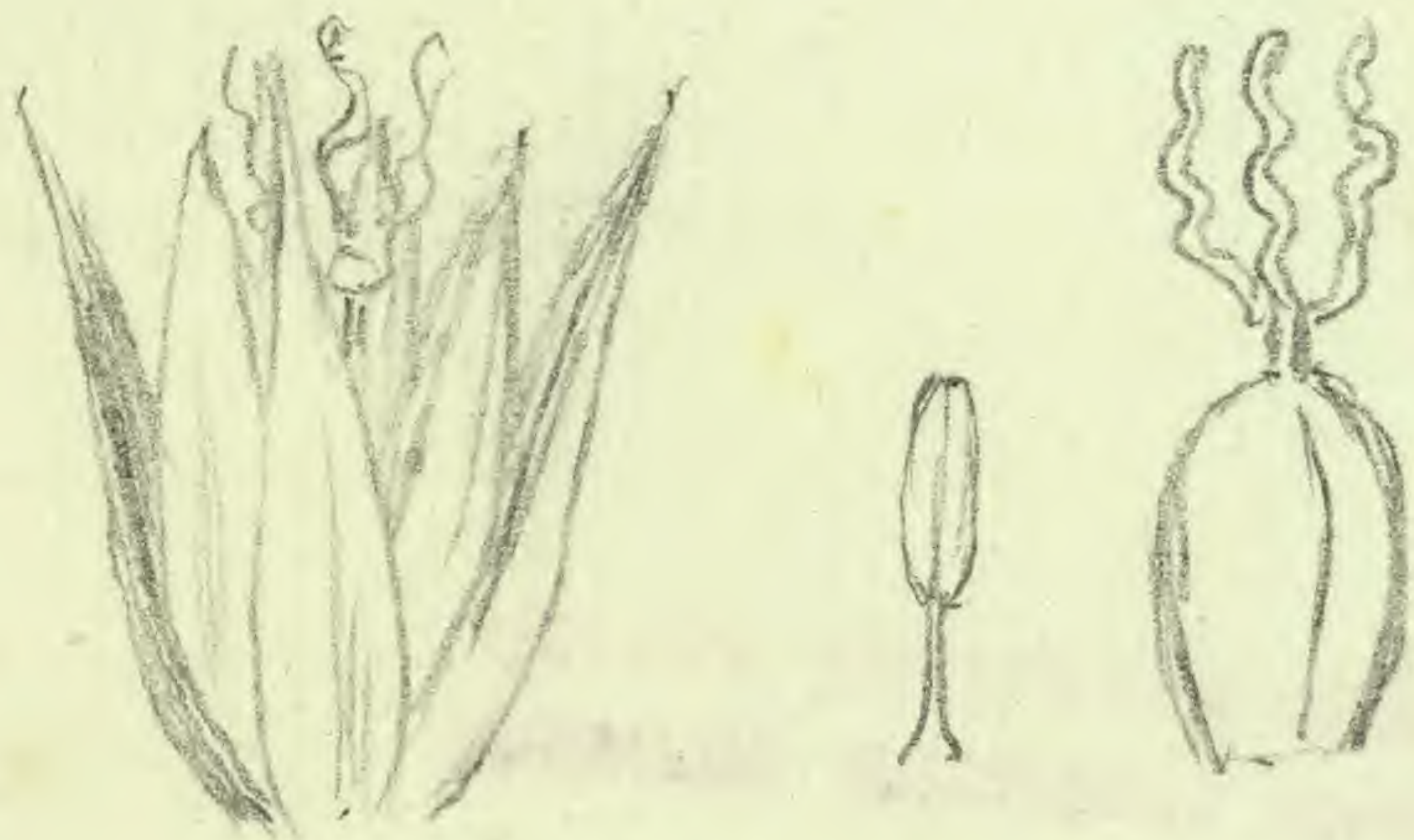
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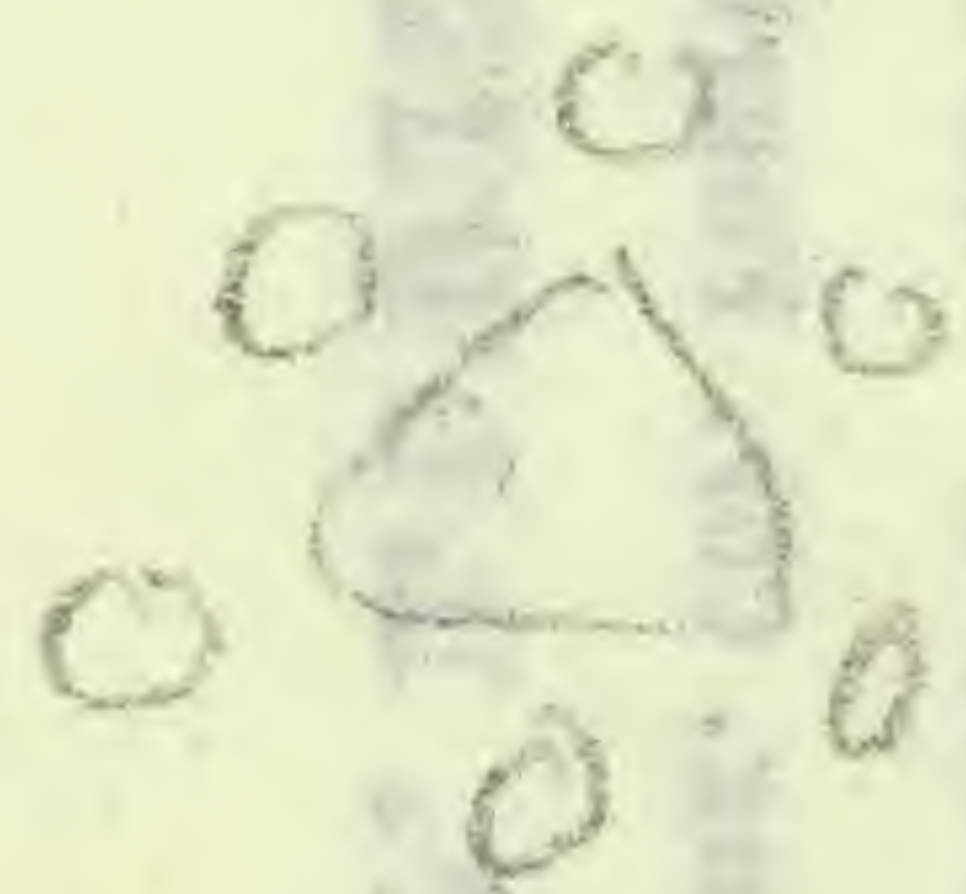


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Senecio Diffusus Hoppe March 15 1866
 Regensburg, ex Hb. Hb. S. Missouri



sepala interiora
breviora mucronata



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I. vaginatus R. Br.
Sandus

TEMPERATURE.

	Jan.	Feb.	Mar.	Apr'l.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean of Year.
1861...	32.2	40.4	44.8	58.1	64.1	76.9	77.5	78.6	69.1	57.9	46.0	39.7	57.1°F.
1862...	28.9	30.2	43.2	55.0	69.7	75.1	81.2	80.7	72.1	57.3	42.6	41.3	56.4°F.

RELATIVE HUMIDITY.

	Jan.	Feb.	Mar.	Apr'l.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Mean of Year.
1861...	72.2	63.3	64.5	61.5	66.3	70.8	66.3	69.6	77.3	76.6	69.0	74.3	69.5
1862...	85.3	73.9	70.8	67.0	57.3	67.0	66.8	64.3	74.2	67.2	69.5	74.6	69.8

III. Yearly mean of Positive Electricity of Temperature, and of Relative Humidity of the Atmosphere, at the hours of 6, 9, 12, 3, 6 and 9, from morning till night, based upon daily observations at these hours through the years 1861 and 1862, at St. Louis, Mo.

ELECTRICITY.

	At 6 A.M.	At 9 A.M.	At 12 M.	At 3 P.M.	At 6 P.M.	At 9 P.M.
1861	8.6	10.0	9.2	7.9	8.7	6.9
1862	8.9	10.0	9.1	7.3	8.1	6.8

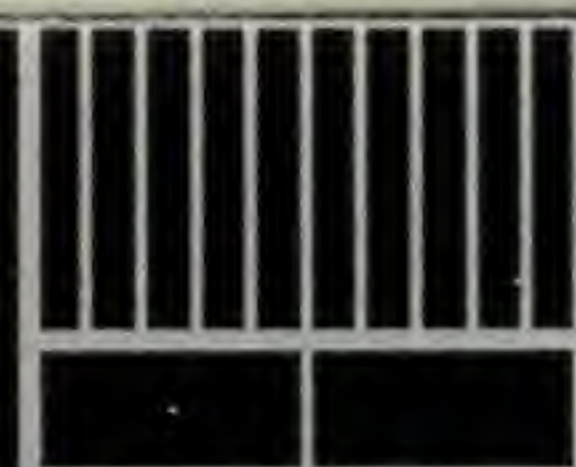
TEMPERATURE.

1861	48.9°F.	54.9	61.6	63.6	59.3	54.3
1862	48.9	55.0	60.9	62.3	58.0	53.6

RELATIVE HUMIDITY.

1861	86.4	71.3	60.3	57.2	65.1	77.3
1862	5.3	70.6	60.0	57.5	67.6	78.0

139-41



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PAGET'S SURGICAL PATHOLOGY. Lectures on Surgical Pathology, delivered at the Royal College of Surgeons of England. By JAS. PAGET, F. R. S., Surgeon Extraordinary to Her Majesty the Queen; Surgeon in Ordinary to His Royal Highness the Prince of Wales; Surgeon to St. Bartholomew's and Christ's Hospitals. Third American Edition. Philadelphia: Lindsay & Blakiston. 1865.

For sale by Jas. M. Crawford, No. 54 Fourth street, St. Louis.

HAND-BOOK OF SKIN DISEASES FOR STUDENTS AND PRACTITIONERS. By THOMAS HILLIER, M. D., London, Member of the Royal College of Physicians; Physician to the Skin Department of University College Hospital; Physician to the Hospital for Sick Children. With Illustrations. Philadelphia: Blanchard & Lea. 1865. For sale by Jas. M. Crawford, No. 54 Fourth street.

BEASLEY'S BOOK OF PRESCRIPTIONS. Containing 3000 Prescriptions, collected from the Practice of the most Eminent Physicians and Surgeons, English, French and American. By HENRY BEASLEY, Philadelphia: Lindsay & Blakiston. 1865.

For sale by E. P. Gray, No. 90 Fourth street, St. Louis.

"*J. rugosus*, A. Br." "
non A. Br.
J. Preissii pro temp.

Gaudy

142



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" *Juncus vaginatus* "

March 14 1866

Tasmania, Quam in Hb. Gray

Smaller Specimen

J. pallidus



sepals ovate lanceolate
acute
inner ones a little shorter



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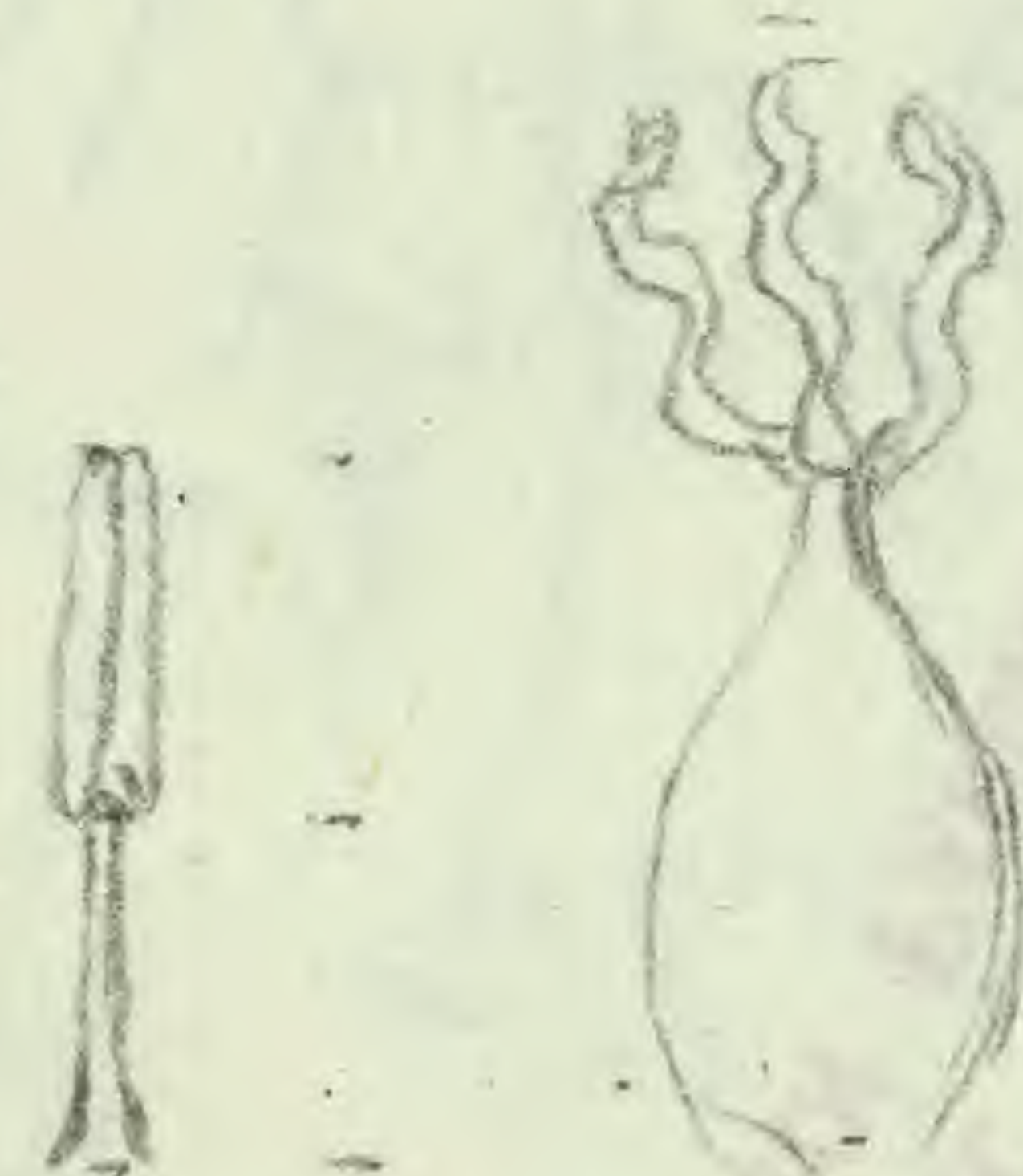
"*J. vaginatus* R. Br."

March 14 1866

Tasmania; F. Mueller in Hb Gray
Shrub

probably correct
a tall stout plant

perhaps 4-5 feet (only upper part seen)



all the Capsules full
of brown (fungous?)

sepals acute
interior part brown

Dust, no seeds seen in here

This one fell out in shaking

the plant - mature? belonging here?



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see original descr. in number 2.319



Juncus vagratus R.Br.

Tasmanian Gunn

Dr H.C. Hook & A.C. Gray

(larger specimen)

see original descr. in Hunt. 3. 319



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March 14. 1866

No 1864 Preiss Nov Holl

March 14 1866

sub nom

J. vaginatus

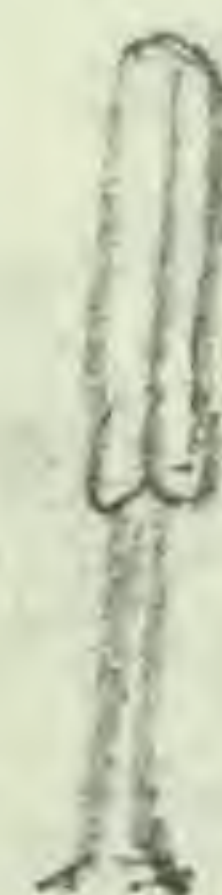
Hb H. B. K. 11000

x60



about 7 ribs
visible

x150



late
sepala lanceolata acuta vix trinervia
interiora paulo breviora

Distinguished by the short invol. sheath, large flowers, seeds



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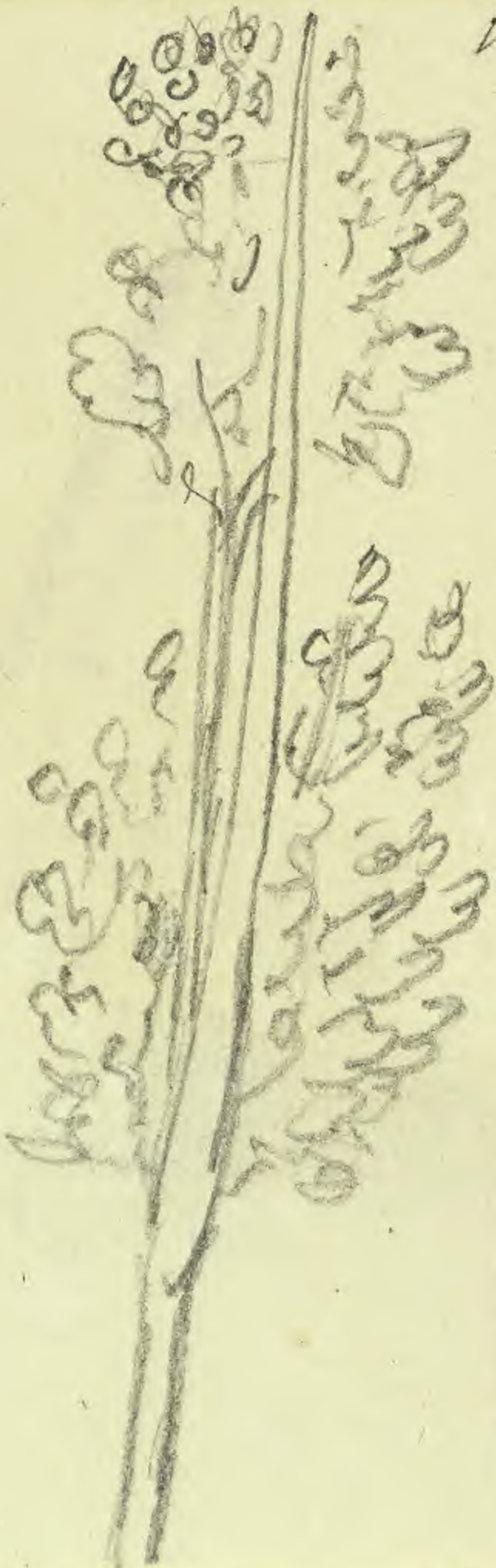
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March 14. 1866

N. 1864 Treiss. N. Hall.

Hb Hb Missouri

L. vaginata



APOTHECARY
Marble

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136-7

Topaz in Utah. By HENRY ENGELMANN.

During my explorations in Utah as Geologist of the Expedition under Capt. J. H. Simpson, Top. Eng'rs. U. S. A., in 1858 and 1859, I observed some remarkably beautiful crystals of Topaz among some detritus of trachytic porphyry. They were perfectly colorless, transparent, sharply developed, and of great lustre. They were all short columnar. The largest of them measured scarcely one third of an inch in the direction of the basal cleavage, which was highly perfect. I observed ten modifications: all crystals exhibited (according to Prof. Rose's designation)

$\infty c : b : a$, $\infty c : b : 2 a$, $c : \infty b : : \infty a 1$,
 $4 c : b : \infty a$, $2 c : b : a$;
 most of them also $2 c : b : \infty a$, $c : b : a$;
 a few only $2 c : \infty b : a$, and $4 (?) c : b : a$.

As in none of the crystals were both ends developed, I could not ascertain whether they were hemihedral, as is most common with topaz. The hardness of the mineral is =8. It is infusible before the blowpipe; and when strongly heated is coated with small blisters, but does not show any change of color. It exhibits the reactions of fluorine, alumina, and silic. No tests were made for other elements, nor were the crystals examined in regard to pyro-electricity and polariza-

J. glaucus

Engelm. apylos



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ELÆACRINUS KIRKWOODENSIS, n. sp.

Body very small, subglobose, a little longer than wide, flattened above and below. Basal pieces very gently concave, with their edges on a level with the plane of the under side. Radial pieces (fork pieces) reaching to the base and occupying more than four fifths the entire length of the body, narrow below and widest in the middle, sides gently arched. Interradial pieces subdeltoid, very prominent towards the apex, much longer than wide, obtusely angulated below, acutely angulated above, and notched on either side a short distance below the summit. Pseudo-ambulacral areas extending from base to summit, narrow, deeply impressed; sides nearly parallel; pore pieces amounting to about fifty in each field. A longitudinal fissure or slit extends from the central summit opening downwards, separating the pore pieces of one side from their fellows of the opposite for the distance of about one fifth the length of the field, thence their inner edges are united in the median line to the base. Pseudo-ambulacral spaces lanceolate, sloping gently from their edges to the sutures. Ovarial apertures eight, very minute, situated at the notches of the interradial plates. Anal opening large, circular or very slight-
lines are not plainly exhibited

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Tamias glaucus
Tamias Germany 1826-29

Aug 21 1865

X60



X10



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Juncus glaucus

Tacoma, 1865

Aug 21 1865



x60



Seed of same
capsule



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ering.

Dimensions.—Length, 0.20 of an inch; width, 0.18.

The *Elæacrinus Kirkwoodensis* is nearly allied to *E. (Pentremites) melo*, from which it is distinguished by its much smaller size and less deeply excavated base. It also occupies a higher geological position.

Occurs in the St. Louis Limestone (Carboniferous) on the Pacific railroad near Kirkwood, St. Louis county, Missouri.

8

I. pallidus ABr
baldy

133-4



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as' range of mountains, circumstances prevented me from obtaining more than a few crystals, which are now deposited in the collection of the Smithsonian Institute; a few others are also in the hands of members of the party. We were travelling at the time by forced night marches with nearly worn out animals, seeking to gain a spring of water in a distant range of mountains. This desert was then entirely unexplored. I have but little doubt that more interesting materials are to be found at the same point.

The mountains of the former Territory of Utah promise a rich yield to the mineralogist. We know already of gold and silver ores in the east, west and south part of that district; of copper and lead ores in the south, and I have discovered the latter also in the centre of it; of specular iron ores and native sulphur in the Rocky Mountains and near Little Salt Lake; of rock salt in the mountains south-east of Utah Lake; of native alum near Salt Lake; of various other salts in the deserts; and of silicates, composing the granites, porphyries, diorites, trachytes, and lavas, nearly over the whole area.



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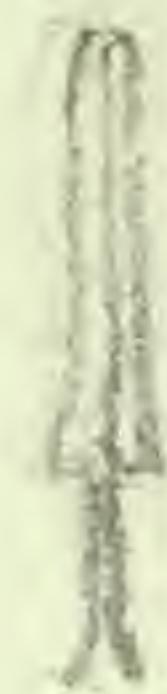
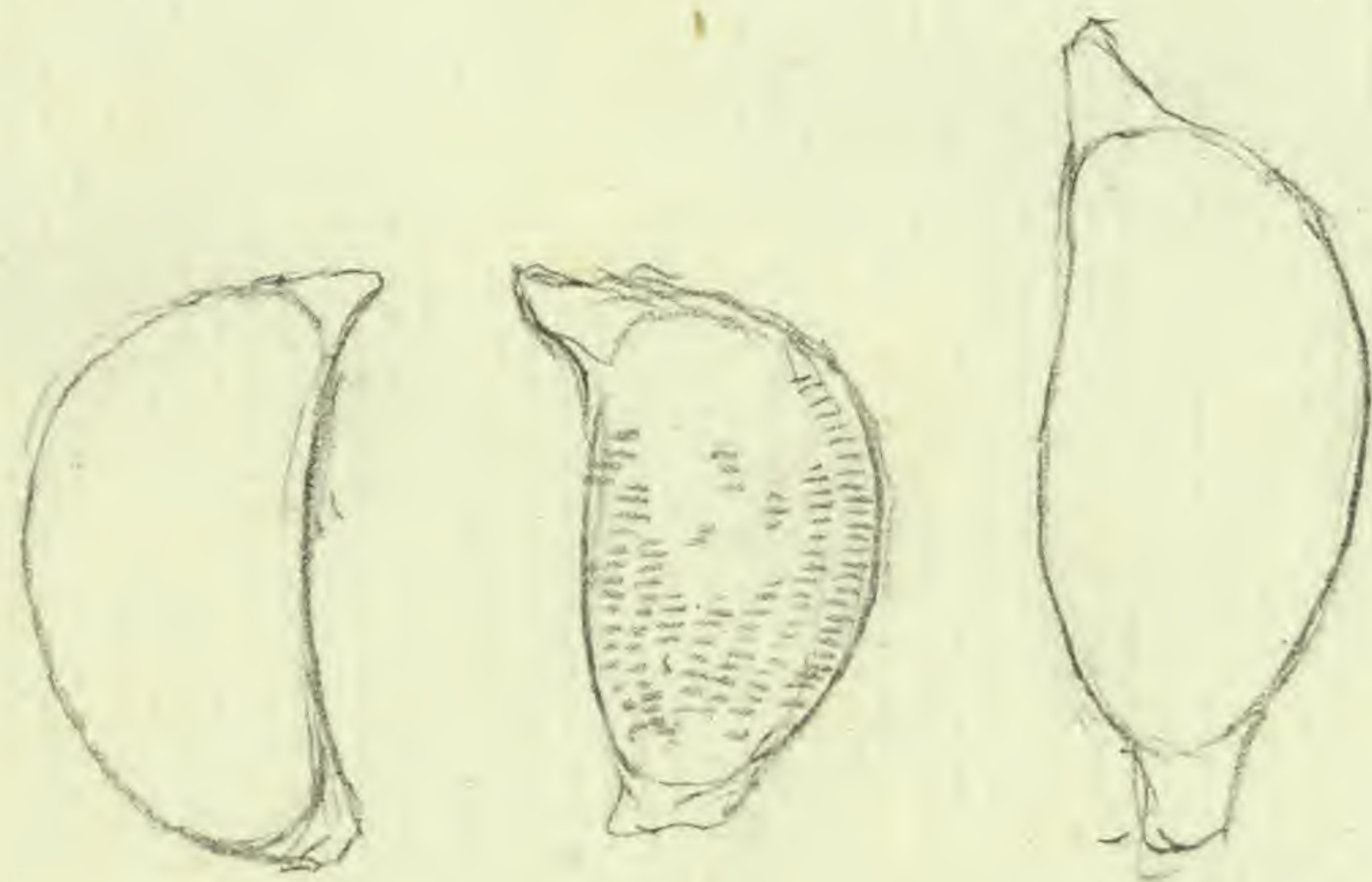
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I. pallidus R.Br. Port Jackson En March 12 1866
 Port Jackson, N. Holland. Sibson 429

N. 430. — — — — — named *I. vaginatus* by Sibson
 and *pallidus* by Kunth is exactly
 the same 3 androg plant, only
 larger and seeds larger, like
 the largest of these have



x 150

sepals interior aequal
 sen vix paulo longior
 obtusum

stam of another
 more slender flower
 of same stock



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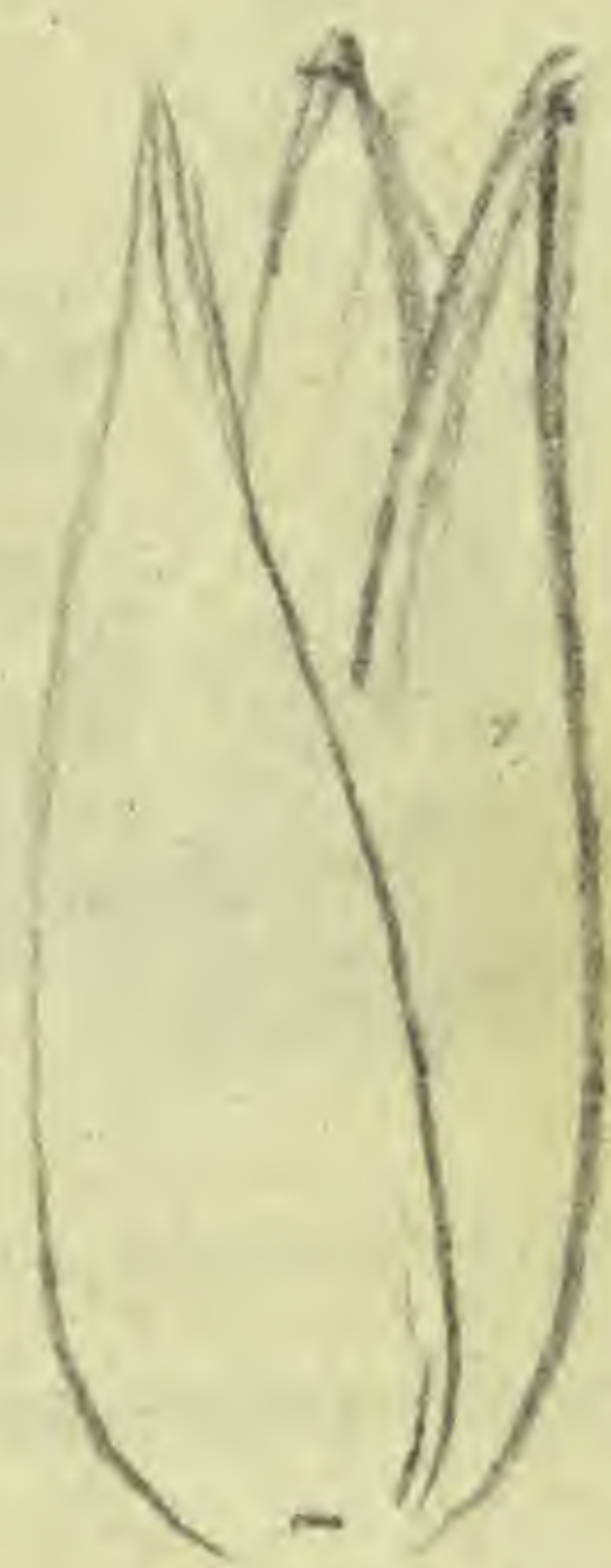
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" *Juncus pallidus* R. Br "

March 14 1866

Tasmania, Gunn - Hb. Gray

x 10



buds, sepals very pale, smooth
shining, without ribs - of equal length
ovate lanceolate



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W. Hook
W. Gray

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Juncus pallidus A. Br.

Tesmana, Java

ex Hb Hook
in Hb Gray

a stout plant
with very contracted
very unequal
(ramis inequalibus)
panicula

specimen not yet
in flower.

Br. Hb. Nov Holl
1. 258

J. pallidus ... panicula
ramis inequalibus divisis
ramulis congestis
floribus aggregatis alternis
caps ovalibus ~~obtusis~~
perianthis acuto paulo

subimbricatis

longioribus



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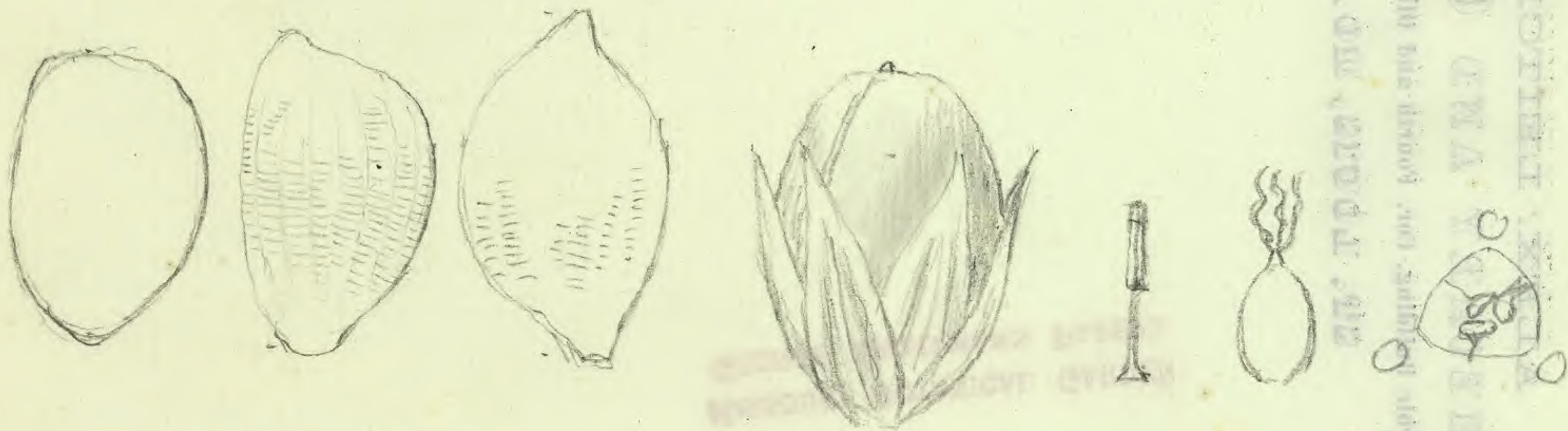


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895 *Junon*

March 22 1866

Korean Archipelago, Oldham



3 filaments persistent
anthers deciduous
sepals acutelongis 3 nerved
vagina subulate - amplexant
anther



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J. australis H. f.

March 18 1866

Why not procerus?

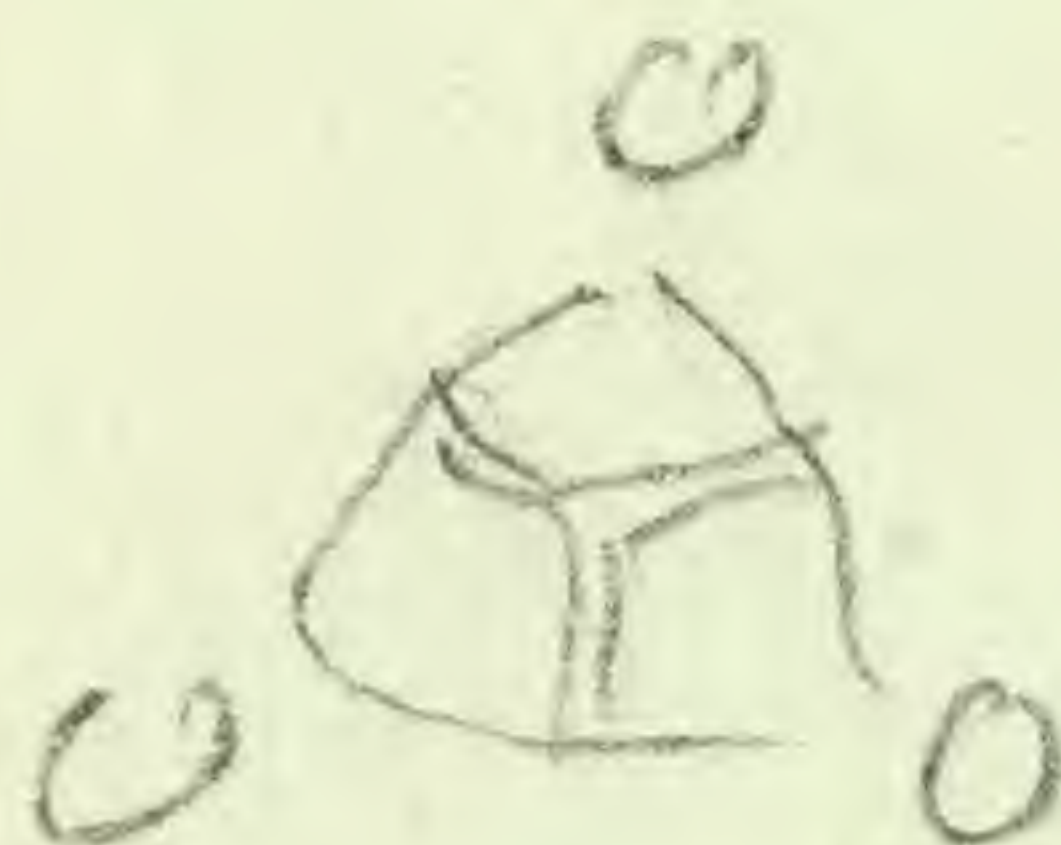
humilior

Tasmania, Gunn

= H. Gray



caps. very young



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